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Analysis of The Impact of Maternal Health Education on Growth Stimulation of Children Aged 0 - 3 Years

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Abstract. *The development support supplied by the mother and family is very crucial in its influence on the growth of the kid. Lack of stimulation can lead to developmental issues and possibly irreversible. The purpose of this study is to analyzed the impact of health education on mothers to stimulate the growth of children aged 0 to 3 years.*
The research design used is pre-experimental design using pre-posttest. The population consisted only of mothers with children aged 0 to 3 years who took their children to the Cibinong healthcare research facility, with 23 respondents. The population is sampled using purposive sampling techniques. The variables employed are Independent Variable which is health education on stimulation of child development aged 0-3 years and Dependent variable that is knowledge of the mother before and after providing health education on stimulation development of child aged 0.-3 years. Data collection is gathered utilizing questionnaires, data processing through editing, coding, scoring and tabulating. The Wilcoxon Match Pair Test was tested.
The results of the study showed that mother's knowledge before receiving health education was the criterion of knowledge less with the highest score of 13 respondents (56,52%). And mother's knowledge after obtaining health education with the highest criteria of good knowledge of 15 respondents (65.22%). The Wilcoxon test results showed differences in mother information before and after receiving health education treatments about stimulation of child development aged 0-3 years (σ≤0,05).
Based on the results of the study, it can be known that there is an influence of differences in knowledge of mothers before and after giving health education treatment on the stimulation of the development of children aged 0-3 years, so it is expected that mothers are more eager to seek information to add knowledge and identify developmental delays from an early age.

Keywords : *Health Education , Knowledge, Stimulation of Child Development*

1. INTRODUCTION

Knowledge of child development is very crucial for parents, since if an educator does not know what development means, then do not anticipate too much of the educational performance they aim for, because it may be fatal to the pupil, one of which is developmental delay. In order accomplish this, parents need further education, such as asking doctors, other parents, local community organizations, schools, child care and other groups that specialize in child problems. Parents will know more. Discipline involves the development of physical components, language development, cognitive development and social development. In addition, the project aspires to promote the understanding of parents and families on family health, nutrition, breastfeeding, immunization and the exploitation of available resources. Due to the hard employment of all working parents, the role of parents is reducing, resulting in a loss of emotional connection with the child. Poor interactions between parents and children could affect the child's intellectual development and social skills and lead to failure.

Early detection comprises screening or early finding of developmental issues in early life, including monitoring parents' complaints about child development. Early childhood development intervention contains corrective intervention that uses the child's brain to mend developmental defects in children so that growth and development return to normal or the anomaly doesn't get worse. According to global data, about 20-40% of babies aged 0-3 years experience developmental delays. The prevalence of child development problems in various developed and developing countries, including in the United States was 12-16%, Argentina 22%, and Hong Kong 23%. (WHO, 2017). According to the Indonesian Ministry of Health, in 2010, 11.5% of children in Indonesia suffered from growth and developmental disorders. The findings revealed the overall child

development index in Indonesia comprised 88.3%. According to Damayanti (2005), estimates that 48% of Indonesian children display impairments in their sociability skills. stimulation that can be supplied and developmental irregularities in children aged 0-3 years, provides guidance and always encourages the mother to always follow up with information about the stimulation of the development of children age 0-3 years, through the media information. With this background, parents still rarely understand how to promote early childhood. Therefore, researchers are interested in conducting research with the title The impact of health education on mothers on the growth stimulation of children aged 0 - 3 years. The purpose of the research is to examine the impact of health education on the knowledge of mothers who have children aged 0 - 3 years on stimulation of child development

2. LITERATURE REVIEW

1.1 Pengaruh Pemberian Stimulasi Dengan Acuan Buku Kia Oleh Ibu Terhadap Perkembangan Anak Usia 0–3 Tahun Di Posyandu Wilayah Kerja Puskesmas Raci Kabupaten Pasuruan (Impact of Stimulation With Acuan Books By Mother on Child Development Aged 0–3 Years In Posyandu Working Region Puskesmas Raci Districts)

Maternal and Child Health Handbook is one of references in children development stimulation. There was increasing numbers of children with developmental disorders in Raci Community Health Center, Pasuruan. The objective of this study was to examine the effect of maternal stimulation based on Maternal and Child Health Handbook on 0-3 years old children development. This study was an analytic observational study applying prospective cohort approach. The population of this study consisted of 110 mothers and 110 children aged between 0 and 3 years old while the samples of this study consisted of 100 mothers and 100 children aged between 0 and 3 years old chosen based on simple random sampling technique. The independent value of this study was maternal stimulation based on Maternal and Child Health Handbook while the dependent variable was child development as measured on Pre-Screening Development Questionnaire (Kuesioner Pra-Skrining Perkembangan/KPSP). Data were tested with Fisher's exact test ($\alpha = 5\%$, $df = 1$). The results showed that there was a correlation between maternal stimulation prescribed in Maternal and Child Health Handbook given by the mother on her 0-3 year old children development. (Afiat Dwi Pawestri, Dhasih. 2015).

2.2 The Effect of Education Giving on The Parent's Behavior About Growth Stimulation in Children with Stunting

The research method uses quasi-experimental pre-post test with control group design. Data analysis was carried out by Paired T-Test analysis. Respondents in this study were mothers with 1-3 year old stunting children in Sleman Regency. The sampling technique used in this study was using purposive sampling technique. The number of samples in this study was 37 people. The results showed that there was an effect of providing education on the stimulation of child growth and development of parents' children with Stunting with a significance value of $p = 0.002$ ($p < 0.05$). There is are the influence of education giving on the parent's behavior about growth stimulation in children with stunting. (Suci Hati, Febrina & Arantika Meidya Pratiwi, 2019)

3. RESEARCH METHODS/METHODOLOGY

The research design used is pre-experimental design using pre-posttest. The population consisted only of mothers with children aged 0 to 3 years who took their children to the Cibinong healthcare research facility, with 23 respondents. The population is sampled using purposive sampling techniques. The variables employed are Independent Variable which is health education on stimulation of child development aged 0-3 years and Dependent variable that is knowledge of the mother before and after providing health education on stimulation development of child aged 0.-3 years. Data collection is gathered utilizing questionnaires, data processing through editing, coding, scoring and tabulating. The Wilcoxon Match Pair Test was tested.

4. RESULTS AND DISCUSSION

The results of the study showed that mother's knowledge before receiving health education was the criterion of knowledge less with the highest score of 13 respondents (56,52%). And mother's knowledge after obtaining health education with the highest criteria of good knowledge of 15 respondents (65.22%). The Wilcoxon test results showed differences in mother information before and after receiving health education treatments about stimulation of child development aged 0-3 years (σ≤0,05).

Table 1. Distribution of frequency differences in mother's knowledge before giving and after giving health education about stimulating child development 0-3 years old

No.	Knowledge	Well		Enough		less	
		F	%	f	%	f	%
1.	*Pra health education*	1	4,35	9	39,13	13	56,52
2.	*Pasca health education*	15	65,22	5	21,74	3	13,04
	Total	**16**	**100**	**14**	**100**	**16**	**100**

Ranks

		N	Mean Rank	Sum of Ranks
AFTER - BEFORE	Negative Ranks	0[a]	.00	.00
	Positive Ranks	22[b]	11.50	253.00
	Ties	1[c]		
	Total	23		

Note:

a. AFTER < BEFORE

b.AFTER > BEFORE

c. AFTER = BEFORE

Test Statistics[b]

	Pra – pasca
Z	-4.125[a]
Asymp. Sig. (2-tailed)	.000

Note:
a. Based on negative ranks.
b. Wilcoxon Signed Ranks Test

According to the results of the study, 23 respondents said that most mothers had less knowledge, 13 individuals (56,52%) and 9 people (39,13%) had enough understanding, then 1 person (4,35%) had good knowledge. The absence of health education activities at all health care facilities, such as Posyandu or other health-related activities, can interfere with the knowledge of the mother to improve the growth of the child. In addition, the restricted ability of respondents in retaining the information presented is also one of the causes for notining good contact between respondents with health education providers. In addition, there are additional factors that can affect the knowledge of respondents: the employment of the respondent with the majority of respondent working as an entrepreneur as 11 respondents (47,83%) and non-employed as 8 respondents. (34,78). Because the women are so busy as entrepreneurs, they have little time at home thus they pay less attention to their child's growth, especially when looking for information to support the growing 0-3-year-old. In addition, the housewife prefers to be silent at home and does not get information from outside. However, not all home mothers have a lack of information, it all depends on individual response. If respondents are able to utilize their leisure time seeking for knowledge to assist the growth of 0-3-year-olds by reading books, magazines, modern media such as television and radio, they may also obtain too much excellent information. Therefore, we expect that respondents better comprehend what it means to assist the growth of 0-3 year olds. In June 2023 in Cibinong, the results of mother knowledge after receiving health education treatment in 23 respondents for growth stimulation of children aged 0-3 years showed most of the knowledge increased, and in 15 people (65.22%) and 5 people (21.74%) had sufficient knowledge, 3 people (13.04%) had information less. It is assumed that at the time of conducting the health education treatment respondents are more curious about what is meant by stimulation of child development, the basic principles of stimulation, classification of groups of stimulations according to the age of the child, stimulation to develop rough movements and stimuli to develop beautiful movements, stimulate the development of speech and language as well as encourage the development and independence of socialization. In order for the responder to be more attentive and actively asking about things they do not know, adding to their knowledge and also allowing respondents to foresee developmental delays in their child. In addition, the information offered by researchers about the treatment of health education was highly accepted. Another element that impacts the respondent's knowledge is education. According to the survey results, the majority of respondents with high school education are 12 respondents (52,17%). From the results of the study, it can be said that the better the education, the easier it is for him to integrate and grasp the information he receives. It is compatible with the premise that one of the elements affecting knowledge is education, which refers to the guidance given to grow others towards a particular objective. For example, education is vital to gain health promotion information so that it can increase quality of life. Based on the survey, 20 respondents (86.95%) had the most criteria to have good awareness of the necessity of post-mother developmental stimulation given health education treatment. To add information, respondents should also actively search for the latest information from other sources and share the information obtained with other respondents who do not know it, so that excellent communication is realized. the results of a statistical test done using a computer using the Wilcoxon matched pair test with 23 respondents obtained a z-score of -4,125 with a significance (σ) value of 0,000. This suggests that the significance of the difference in knowledge between the mother before and after the treatment of health education is at the level of error (σ) of 5% or 0,05 0,000 ($\sigma \leq 0,05$). The results of the analysis showed that the knowledge of respondents before receiving health education treatment increased by 22 respondents (95.65%) compared with after consultation, at the significance rate (σ) = 0,000 ($\sigma \leq 0,05$), then H1 was received, that is, the mother's knowledge before and after receiving the medical education treatment there was a difference in promoting the development of the child from the age of 0 to 3 years. The disparities in mother's knowledge about the enhancement of child development aged 0-3 years are substantiated by specific facts. The highest rise was in the result of 15 persons (65.21%), with only one person (4.34%) or an increase (60.87%).

The stimulation of development is highly crucial for the survival of the child's growth. Proper stimulation of parents or family can avoid developmental delays in youngsters. The success of the treatment of health education also depends on the correctness of the aims and stages of the health education, such as understanding of the problem, the peculiarities of the community and the local environment. In addition, prioritizing concerns, objectives, content, methods, medium or instruments, conducting assessments and including implementation plans can assist the success of health education efforts.

CONCLUSION

1. The mother's awareness of pre-treatment health education regarding stimulation of growth of children aged 0-3 years (56,52%) suggests a lack of knowledge
2. The mother's degree of knowledge following analysis of the increase in child growth between 0 and 3 years of age reveals good knowledge (65.22%)
3. Based on the results of statistical tests using the Wilcoxon Match pair Test with a level of significance (σ) of 0,000 (σ ≤ 0,05), then H0 is rejected and H1 is received meaning there is a difference in information given to mothers about child growth support aged 0-3 years before and after the treatment of health education

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